

Amendments to the claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A composition comprising a population of mammalian muscle progenitor cells derived from joint tissue, said cells having *in vivo* myogenic properties and providing a persistent pool of satellite cells when introduced into mammals and characterised by the expression of c-met as a positive marker or any marker coexpressed or co-detectable with this positive marker and by the expression of gdf5/cdmp1 as a negative marker or any marker coexpressed or co-detectable with this negative marker.

2 – 35 (canceled)

36. (new) A composition according to claim 1 wherein the cells are derived from synovial membrane.
37. (new) A composition according to claim 1 wherein the cell population is characterised by the expression of one or more of the synovial fibroblast positive markers CD44 and CD90 and by the absence of the expression of the negative markers flk-1 or any marker coexpressed or co-detectable with these positive and/or negative markers.
38. (new) The composition according to claims 1 further characterised by the expression of CD34 as a positive marker or any marker coexpressed or co-detectable with this positive marker.

- 39.(new) The composition according to claim 1 wherein the cells are genetically engineered.
40. (new) The composition of claim 39 wherein the genetically engineered cells comprise a promoter operably linked to a nucleotide sequence encoding a protein selected from the group of an angiogenic factor, a peptide growth factor and an anti-angiogenic factor.
41. (new) The composition according to claim 1 wherein the cells are clonal.
42. (new) The composition according to claim 1 wherein the cells are isolated and passaged between 3 and 10 passages.
43. (new) A pharmaceutical composition comprising a composition of muscle progenitor cells according to claim 1 in admixture with at least one pharmaceutically acceptable carrier.
44. (new) A method for repairing or preventing muscle dysfunction in a patient, said method comprising administering the pharmaceutical composition of claim 9 to said patient.
45. (new) The method of claim 44, wherein said dysfunction is selected from a severe trauma, a diffuse trauma and crush syndrome, disuse atrophy, sarcopenia.
46. (new) The method of claim 44, wherein said muscle is cardiac muscle and said dysfunction is a cardiovascular disorder selected from myocardial infarct and heart failure.

47. (new) A method for the restoration of Mechano Growth Factor expression by dystrophic muscle cells in a patient, said method comprising administering the pharmaceutical composition of claim 43 to said patient.
48. (new) A method of regenerating muscle comprising of the step of administering a composition according to claim 1 to an individual.
49. (new) The method of claim 48 wherein the composition is injected into the affected muscle.
50. (new) A method of selecting muscle precursor cells comprising the step of simultaneously or subsequently contacting a joint tissue derived cell population with a binding substance for one or more of the positive marker c-Met and/or the negative marker and CDMP1 or any marker coexpressed or co-detectable with this positive or , this negative marker.
51. (new) The method according to claim 50 wherein the joint tissue derived cell population is obtained from the synovial membrane.
52. (new) The method according to claim 50 wherein the binding substance is an antibody or a ligand for a receptor.
53. (new) A method of providing a persistent reserve population of satellite cells in an individual comprising the step of administering a composition according to claim 1 to an individual.